

AMENDMENTS TO THE CLAIMS**In the Claims:**

The following listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended) A method of etching a semiconductor device having a fuse embedded therein beneath different first and second sets of material, comprising:

(a) first etching at least a first set of material from a first region of the semiconductor device, from the surface of the first set of material in towards the embedded fuse;

(b) measuring the remaining distance between the embedded fuse and the first etched surface of the first region of the semiconductor device;

(c) second etching an amount of the second set of material from said first region of the semiconductor device, from the first etched surface of the first region further in towards the embedded fuse, the amount of the second set of material being determined based on the preceding measurement of the remaining distance;

(d) measuring the remaining distance between the embedded fuse and the second etched surface of the first region of the semiconductor device; and

(e) determining if the remaining distance measured in step (d) falls within a desired range of distances and, if the remaining distance does not fall within the desired range, returning to step (c).

2. (Original) The method of claim 1, wherein the first etching further etches at least an amount of the second set of material.

3. (Previously presented) The method of claim 1, wherein one of the first and second sets of material comprises at least a passivating layer and the other of the first and second sets of material comprises at least one oxide layer.

4. (Original) The method of claim 3, wherein the first set of material comprises the passivating layer.

5. (Previously presented) The method of claim 3, wherein the other of the first and second set of material comprising at least one oxide layer further comprises at least a second oxide layer.

6. (Previously presented) The method of claim 3, wherein the other of the first and second sets of material comprising at least one oxide layer has uniform diffraction characteristics.

7. (Previously presented) The method of claim 3, wherein the passivating layer comprises a nitride layer.

8. (Previously presented) The method of claim 1, wherein the desired range of distances is $4000\text{-}12000\text{\AA}$ ($4 - 12 \times 10^{-7}\text{m}$).

9. (Previously presented) The method of claim 1, wherein the fuse is a metal fuse.

10. (Previously presented) The method of claim 1, wherein the fuse is a laser fuse.

11. (Previously presented) The method of claim 1, further comprising blowing said fuse.

12. (Previously presented) A semiconductor device having a metal fuse embedded therein, modified by the method according to claim 1.

13. (New) A method of etching a semiconductor device having a fuse embedded therein beneath different first and second sets of material, comprising:

(a) first etching at least a first set of material from a first region of the semiconductor device, from the surface of the first set of material in towards the embedded fuse;

(b) measuring the remaining distance between the embedded fuse and the first etched surface of the first region of the semiconductor device;

(c) second etching an amount of the second set of material from said first region of the semiconductor device, from the first etched surface of the first region further in towards the embedded fuse, the amount of the second set of material being determined based on the preceding measurement of the remaining distance;

(d) measuring the remaining distance between the embedded fuse and the second etched surface of the first region of the semiconductor device;

(e) determining if the remaining distance measured in step (d) falls within a desired range of distances and, if the remaining distance does not fall within the desired range, returning to step (c);

wherein one of the first and second sets of material comprises at least a passivating layer and the other of the first and second sets of material comprises at least one oxide layer; and

wherein the other of the first and second sets of material comprising at least one oxide layer has uniform diffraction characteristics.

14. (New) A method of etching a semiconductor device having a fuse embedded therein beneath different first and second sets of material, comprising:

(a) first etching at least a first set of material from a first region of the semiconductor device, from the surface of the first set of material in towards the embedded fuse;

(b) measuring the remaining distance between the embedded fuse and the first etched surface of the first region of the semiconductor device;

(c) second etching an amount of the second set of material from said first region of the semiconductor device, from the first etched surface of the first region further in towards the embedded fuse, the amount of the second set of material being determined based on the preceding measurement of the remaining distance;

(d) measuring the remaining distance between the embedded fuse and the second etched surface of the first region of the semiconductor device;

(e) determining if the remaining distance measured in step (d) falls within a desired range of distances and, if the remaining distance does not fall within the desired range, returning to step (c);

wherein one of the first and second sets of material comprises at least a passivating layer and the other of the first and second sets of material comprises at least one oxide layer;

wherein the other of the first and second sets of material comprising at least one oxide layer has uniform diffraction characteristics; and

wherein the passivating layer comprises a nitride layer.